

Remarks/Arguments

This paper addresses the issues raised in the Office Action mailed 17 November 2004. This amendment is submitted in compliance with the guidelines of the revised amendment practice. See 1267 Off. Gazette 106.

Claims 1-3 and 6-26 are currently pending. The drawings were objected to under 37 CFR 1.84. The indicated allowability of claims 18-22, and potentially claims 6, 10, 11, 13 and 17, was withdrawn in view of newly discovered reference to Slater (USPN 4,941,187) and Elko (USPN 6,041,127). Claims 6 and 14 were rejected under 35 U.S.C. § 113 (sic) (it is believed this is a typo and the rejection is actually under 35 U.S.C. § 112) as being indefinite and claim 10 was rejected as being without proper antecedent basis. Claim 10-11, and 24-26 were rejected under 35 U.S.C. § 102(b) as being anticipated by Kinoshita (USPN 5,734,724). Claims 1, 2, 6-9, 14, 15, and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kinoshita in view of Begault, D.R. ("Techniques"). Claims 3, 12 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kinoshita in view of Techniques and in further view of Slater. Claim 16 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Kinoshita in view of Techniques and further in view of Lanciaux (USPN 5,905,464). Claim 17 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Kinoshita in view of Lanciaux. Claims 18-22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kinoshita in view of Slater and Elko. Claims 1, 6-14, and 18 have been amended. No new matter has been added. Claims 15-17 have been cancelled. As set out below, Applicant respectfully submits that the present invention as claimed is patentable over the cited art and

urges the Examiner to reconsider the pending rejections.

Drawing Objection

The Examiner has initially objected to the drawings due to nonconforming lines and margins. Applicant submits new formal drawings will be submitted upon the Notice of Allowance. Accordingly, Applicant asks that this objection be held in abeyance pending the issuance of a Notice of Allowance in the matter.

Allowable Subject Matter

Examiner Graham withdrew the indicated allowability of claims 18-22, and potentially claims 6, 10, 11, 13 and 17, in view of newly discovered reference to Slater (USPN 4,941,187) and Elko (USPN 6,041,127). It is respectfully submitted this withdrawal should be reconsidered.

The MPEP indicates that an Examiner should give full faith and credit to the search and action of a previous Examiner unless there is a clear error in the previous action or knowledge of other prior art. In general, an Examiner should not take an entirely new approach or attempt to reorient the point of view of a previous examiner, or make a new search in the mere hope of finding something. See, MPEP, Section 706.04.

In the present Office Action, Examiner Graham recited new art, i.e. Slater and Elko, as the basis for the withdrawal, but failed to indicate if there was any error in Examiner McChesney's earlier search and actions regarding the allowability of the subject claims or if

he had any prior knowledge of this new art. Moreover, there is no indication that Examiner Graham did not engage in new search in the hope of finding this new art. This position is supported by the fact that one of the cited new art references, the Elko reference, was only cited against the subject claims and no others. Accordingly, it is respectfully submitted the prior allowance of the subject claims be reinstated and the withdrawal thereof be withdrawn.

Claims Rejection - 35 U.S.C. § 112

Examiner Graham has rejected Claims 6 and 14 under 35 U.S.C. § 113 (sic) (it is believed this is a typo and the rejection is actually under 35 U.S.C. § 112) as being indefinite and claim 10 as being without proper antecedent basis. As to Claims 6 and 14, Examiner Graham indicated the word “sufficient” located therein renders these claims indefinite. Claims 6 and 14 have been amended to remove the word “sufficient” therefrom. Reconsideration is respectfully requested. As to Claim 10, Examiner Graham indicated the limitation “the third right summer” lacks sufficient antecedent basis. Claim 10 has been amended to address this matter. Reconsideration is respectfully requested.

Claims Rejection - 35 U.S.C. § 102(b)

(Claims 10-11 and 24-26)

Examiner Graham has rejected Claim 10-11, and 24-26 were rejected under 35 U.S.C. § 102(b) as being anticipated by Kinoshita (USPN 5,734,724). Claims 10 and 11 have been amended. As shown below, it is respectfully submitted that these Claims are not anticipated

by Kinoshita. Reconsideration is respectfully requested.

In making this rejection, Examiner Graham concluded that Kinoshita included all the limitations of the stated claims. More specifically, it was concluded that this reference discloses an audio communication control unit, wherein the properties of the sound images of various input audio channels are controlled in regards to their perceived spatial position and that this audio communication control unit includes all the limitations set out in the communication system as set out in the rejected claims.

Kinoshita

Due to Kinoshita being included in all rejections in the pending Office action, a brief discussion of this reference is in order.

Kinoshita discloses a teleconferencing communication control unit where each of several participants can both speak and listen simultaneously, i.e. a duplex system, and all the participants have at least stereo feeds from the system. The ability of all participants to speak and listen is critical in this reference due to the nature of teleconferencing. The lack of the ability for all participants to hear the other participants would defeat the purpose of this reference.

Kinoshita teaches a teleconferencing system that requires all terminals to be connected to a central audio signal processor. Kinoshita states its system "permits the implementation of a multi-point teleconference that yields high intelligibility for multiple audio signals in case of multiple simultaneous utterances without the need of equipping each terminal with high audio

signal processing capability. (Col. 3, lines 13-18). Each of the terminals in this system are “composed of a microphone MC, a transmitting part 51, a decoding part 52 and reproducing parts 53L and 53R.” (Col. 7, lines 6-8) The terminals are connected via communication lines which are “capable of interactive audio communications”, i.e. bidirectional communication lines. (Col. 8, lines 35-36). Due to this system being designed for telecommunication, it is logical that all the terminals have the ability to send and receive signals.

The Kinoshita system employs psycho-acoustic localization to distinguish one signal from another. More specifically, Kinoshita describes a system where the overall level (both ears) of one signal source is higher than others, but that source is either equal in both ears or absent entirely from one ear. (Col. 11, line 41; Col. 13, line 6). Further, Kinoshita uses transfer functions (Col. 15, line 9) to position sounds, or uses a “principle speaker” concept (Col. 7, line 58) and assigns a special position and loud volume to that speaker (Col. 11, Line 30), while the other participants are mixed together. This assignment of “principle speaker” is dynamic, typically switching to whoever started talking first. Kinoshita’s principle point is to use one set of spatial processors for all of the participating terminals, rather than each terminal having its own set of processors.

The present invention as set out in the subject claims, as amended, is directed toward the ability to distinguish multiple sound signals simultaneously, irrespective of whether any of the sources providing those signals can receive the signals from other sources. In fact, the claims have been amended to include that at least one source cannot simultaneously receive the sound signals from another source. As an example of use in an aircraft, the source sending

a signal in the form of a continuous weather broadcast is unable to hear the other signals from the other sources, i.e. signals from the pilot, passengers, tower, etc.

Accordingly, Kinoshita does not include all the limitations as set out in Claims 10-11 and 24-26, as amended. Reconsideration of the rejection is respectfully requested.

Regarding Claim 25, Claim 25 is not anticipated by Kinoshita on the same grounds as Claims 10-11. Additionally, Kinoshita teaches its acoustic transfer functions utilize localization “by convolving a pair of acoustic transfer functions corresponding to the target position with the left and right branched audio signal corresponding to the input audio signals.” (Col. 6, lines 53-56) In other words, this is yet another example of the differences in the Kinoshita and the present invention as set forth in the subject claims. Kinoshita requires localization whereas the Claim 25 does not. Reconsideration is respectfully requested.

Claims Rejection - 35 U.S.C. § 103(a)

Claims 1, 2, 6-9, 14, 15, and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kinoshita in view of Begault, D.R. (“Techniques”). Claims 3, 12 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kinoshita in view of Techniques and in further view of Slater. Claim 16 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Kinoshita in view of Techniques and further in view of Lanciaux (USPN 5,905,464). Claim 17 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Kinoshita in view of Lanciaux. Claims 18-22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kinoshita in view of Slater and Elko. As shown below, it is

respectfully submitted that these claims are not rendered unpatentable by these references.

Reconsideration is respectfully requested.

Claims 1, 2, 6-9, 14, 15, and 23

Examiner Graham has rejected Claims 1, 2, 6-9, 14, 15, and 23 under 35 U.S.C. § 103(a) as being unpatentable over Kinoshita in view of Begault, D.R. ("Techniques"). Claim 15 has been cancelled with traverse. Applicant reserves the right to file additional continuing applications based on this claim. As set out below, it is respectfully submitted these claims are patentable over the combination of these references.

As set out above, Kinoshita requires all its terminals to have bidirectional communication lines. Techniques does not add this element to Kinoshita. Accordingly it is submitted the subject claims, as amended, would not be disclosed by the combination of these references. Thus, Claims 1, 2 6-9, 14 and 23 are not rendered obvious by the combination of these references. Reconsideration is respectfully requested.

Additionally, regarding Claim 1, it is submitted that the combination of Kinoshita with Techniques would not yield the present invention as claimed. Kinoshita discloses a teleconference control system based on the localization, i.e. spatical differences. Techniques teaches that the effective range of ILD extends to approximately 12 dB. Kinoshita, however, teaches that level differences at extreme ranges of 0 to 100% can be employed. This teaching is in contrast to Techniques. Accordingly, one skilled in the art would not have combined these references. Reconsideration is respectfully requested.

Additionally, regarding Claim 2, Kinoshita does not teach the use of a continuous signal. The cited passage in Kinoshita relied upon by the Examiner discloses the use of an utterance which is made for a certain period in time to determine its principle location. As shown in Fig 9D, if the time was continuous, the line for "T" would extend the length of the chart instead of its intermittent stops and starts. Further, this is only logical in that Kinoshita dynamically changes its principle location due to who is speaking. If there were to be a continuous signal, then the principle location would never change under the teachings of Kinoshita. Accordingly, it is submitted the combination of these references do not render Claim 2 obvious. Reconsideration is respectfully requested.

Claims 3, 12 and 13

Examiner Graham has rejected Claims 3, 12 and 13 under 35 U.S.C. § 103(a) as being unpatentable over Kinoshita in view of Techniques and in further view of Slater. Kinoshita discloses and teaches that each teleconference participant is able to speak and listen to the other participants. Neither Techniques nor Slater suggest or teach this aspect. Accordingly, the rejected independent claims, Claims 12 and 13 have been amended to include the limitation. Reconsideration is respectfully requested.

As set out above, Kinoshita requires all its terminals to have bidirectional communication lines. Techniques does not add this element to Kinoshita. Accordingly it is submitted the subject claims, as amended, would not be disclosed by the combination of these references. Thus, Claims 3, 12 and 13 are not rendered obvious by the combination of these

references. Reconsideration is respectfully requested.

Regarding Claim 3, it is submitted that this claim is not obvious for the same reasons as set out regarding Claim 2. Reconsideration is respectfully requested.

Regarding Claim 12, it is submitted that this claim is not obvious for the same reasons as set out regarding Claim 1. Reconsideration is respectfully requested.

Regarding Claim 13, it is submitted that this claim is not obvious for the same reasons as set out regarding Claim 1. Reconsideration is respectfully requested.

Claim 16

Examiner Graham has rejected Claim 16 under 35 U.S.C. § 103(a) as being unpatentable over Kinoshita in view of Techniques and further in view of Lanciaux (USPN 5,905,464). Claim 16 has been cancelled with traverse. Applicant reserves the right to file additional continuing applications based on this claim.

Claim 17

Examiner Graham has rejected Claim 17 under 35 U.S.C. § 103(a) as being unpatentable over Kinoshita in view of Lanciaux. Claim 17 has been cancelled with traverse. Applicant reserves the right to file additional continuing applications based on this claim.

Claims 18-22

Examiner Graham has rejected Claims 18-22 under 35 U.S.C. § 103(a) as being

unpatentable over Kinoshita in view of Slater and Elko. Kinoshita discloses and teaches that each teleconference participant is able to speak and listen to the other participants. Neither Slater nor Elko suggest or teach this aspect. Accordingly, Claim 18 has been amended to include the limitation. Claims 19-22 depend from Claim 18. Reconsideration is respectfully requested.

As set out above, Kinoshita requires all its terminals to have bidirectional communication lines. Neither Slater nor Eklo add this element to Kinoshita. By the nature of avionic communications, it is known that various communication signals do not have interactive communication lines as required by Kinoshita. It would be known by one skilled in the art not to use a communication system that employs such a requirement. Thus, it is submitted that it would not be obvious to combine Slater with Kinoshita. Additionally, in the event Slater and Kinoshita were to be combined, the resulting system would require bi-directional communication lines else the resulting system would be non-operational pursuant to the teaching of Kinoshita. Accordingly it is submitted the subject claims, as amended, would not be disclosed by the combination of these references, and if combine, the resulting system would not include all the aspects of the subject claims, as amended. Thus, Claims 18-22 are not rendered obvious by the combination of these references. Reconsideration is respectfully requested.

Regarding Claim 18-22, it is submitted that this claim is not obvious for the same reasons as set out regarding Claim 12. Reconsideration is respectfully requested.

Based on the above, Applicant respectfully submits that the application is in condition


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for registration and reconsideration is requested. If the Examining Attorney has any questions or comments or if further clarification is required, it is requested that he contact the undersigned at the below listed telephone number.

It is understood that a two month extension is due. Please consider this to be an extension of such time. A two month extension fee is included with this paper. In the event a fee deficiency have occurred, please contact the undersigned.

Please date-stamp the enclosed post cards and return same to the undersigned in acknowledgment of receipt of all transmitted material.

Respectfully submitted,


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